## **Mitigation Measures**

#### **Water Resources**

All mitigation measures required by the County through the COA and associated MMP for the HCF have been incorporated into the Proposed Action, as well as Lahontan Waste Discharge Requirements (WDR) and are adopted. Since the WDR was silent on this matter, the following additional mitigation also applies:

**W-1:** Drainage facilities built to redirect flow around the adjacent HCF facility must be properly designed and maintained, so as not to result in adverse impacts to the improved road or open route.

### **Air Quality**

All mitigation measures required by the County through the COA and associated MMP for the HCF have been incorporated into the Proposed Action and are adopted. The following mitigation measures pertain to the access road and ROW regarding the protection of regional air quality and are summarized from the COA, as supplemented by BLM:

- **A-1:** Ongoing during construction, the unpaved access route and all associated construction piles shall be sprayed with water frequently enough to minimize generation of visible dust.
- **A-2:** No recycled facility water shall be used for watering operations on public land.
- **A-3:** Prior to initiation of operations, this road shall be improved with a non-asphaltic pavement to minimize dust generation by truck traffic.
- **A-4:** During construction and operation, heavy equipment powered by diesel fuel used at the site shall use lower emitting diesel fuels. All trucks that make deliveries to the site, that are under the control of the applicant, shall also use lower emitting diesel fuels. Idling diesel equipment during constructions shall be shut off after 5 minutes of idling.

# **Biological Resources**

All mitigation measures required by the County through the COA and associated MMP for the HCF have been incorporated into the Proposed Action and are adopted, as supplemented by the CDFG ITP (Appendix F), the USFWS BO (Appendix C), including conditions not specifically related to the access road. The following mitigation measures pertain to the access road and ROW regarding protection of biological resources and are summarized from the COA, as supplemented by BLM:

- **B-1:** The applicant must comply with all terms and conditions of the USFWS biological opinion within the timeframes/phases specified.
- **B-2:** The applicant must comply with all terms and conditions of the CDFG ITP, within the timeframes/phases specified, including the acquisition of all lands for

- compensation and preparation of a Desert Tortoise Translocation Plan if deemed appropriate by CDFG.
- **B-3:** Prior to commencing any ground-disturbing activity, the Applicant shall mitigate and/or avoid impacts to federally- and state-protected species by obtaining required incidental take permits from the United States Fish and Wildlife Service and the California Department of Fish and Game, and by complying with the terms of those permits, including, without limitation and the installation of permanent tortoise fencing along roads as required.
- B-4: All employees, subcontractors, construction personnel, and other individuals who work on-site shall participate in an awareness program addressing desert tortoise, burrowing owl, Mohave ground squirrel, and other federally- and state-protected species at the Hawes site prior to ground-disturbing activities. The program shall be administered by the Authorized Biologist. It may be given in the field, and shall include truck drivers, delivery personnel, and other HCF-related personnel occasionally entering the work site. Wallet-sized certification cards shall be provided to personnel who have attended the training, and personnel shall carry those cards when working on site.
- **B-5:** A permanent tortoise-proof fence shall be installed around the perimeter of the Project impact area prior to ground-disturbing activities. Once the fence is installed, clearance surveys for desert tortoise shall be conducted by qualified biologists to locate and remove any tortoises and close their burrows within the Project impact area. An authorized biological monitor shall be present during construction to ensure that tortoises do not enter the construction area and to remove or rescue any individuals that may be injured. Mortality of any tortoise shall be reported to wildlife agency staff.
- **B-6:** Between February 15 and November 15, the tortoise clearance survey shall occur within 48 hours prior to ground disturbance. Between November 15 and February 14, the survey may be performed several days or weeks prior to ground disturbance, unless ground disturbance will occur during a rain event. Ground disturbance shall not occur during a rain event, unless a clearance survey has occurred within the previous 48 hours.
- **B-7:** Vegetation clearing activities shall occur when tortoises are least likely to be active, including, but not limited to, the period between November 16 and February 14.
- **B-8:** Cross-country (off-road) vehicle use is prohibited and signs shall be posted.
- **B-9:** Except on paved roads with posted speed limits, vehicle speeds shall not exceed 20 miles per hour through desert tortoise habitat. This speed limit shall be posted along all access routes associated with the HCF. Drivers shall take all feasible steps to avoid tortoises encountered on the roads, including, but not limited to stopping and waiting for tortoises to cross the road.

- **B-10:** All trash and discarded food items generated by construction and operation activities shall be promptly contained and regularly removed from the HCF site to reduce the attractiveness of the area to ravens and other potential desert tortoise predators. Prior to ground-disturbing activities, the Applicant shall submit, and the County and the California Department of Fish and Game shall approve, a raven management plan designed to minimize desert tortoise predation as part of the Incidental Take Permit or Permits required under **Mitigation Measure B-2**. Additionally, all artificial water sources must be covered or otherwise made inaccessible to wildlife.
- **B-11:** All deliveries of green material to the HCF shall be made in covered or enclosed vehicles in order to avoid or mitigate the potential for environmental impacts related to invasive species and damage to habitat. The Applicant shall not accept deliveries of green material in uncovered vehicles, and shall post a sign at the entrance to the composting facility notifying drivers of that policy.
- **B-12:** All deliveries of biosolids to the HCF shall be made in covered or enclosed vehicles in order to avoid or mitigate the potential for significant environmental impacts related to damage to habitat, airborne transmission of pathogens, and soil contamination. The Applicant shall not accept deliveries of biosolids in uncovered vehicles, and shall post a sign at the entrance to the composting facility notifying drivers of that policy.
- **B-13:** Tortoise clearance surveys are to be conducted at 15-foot intervals over the proposed ROW development footprint and shall be implemented concurrently with the required HCF surveys as described in **Mitigation Measure B-5** listed above. It is required that two surveys be conducted at specified intervals prior to declaring the site clear of tortoises. All burrows that could provide shelter should be excavated during the first clearance survey.
- **B-14:** A qualified biologist shall monitor the construction area for nesting ravens and work with construction personnel to eliminate the availability of any roost sites for the common raven.
- **B-15:** A qualified biologist shall monitor the construction area for any human-provided subsidies of food or water and work with onsite personnel to eliminate and/or reduce these subsidies. Examples would include maintaining all waste receptacles with proper covers and monitoring the watering of the site to reduce dust so that puddles of water are not produced that remain for over two hours.
- **B-16:** A raven management plan shall be developed for the project site and the road and will include the following measures: the disposal of all trash directly into covered receptacles; weekly removal of trash offsite; monitoring and prompt removal of all sources of standing water; and the removal or destruction of any identified perch or nesting locations (Appendix J).

- **B-17:** Tortoise fencing will be installed on BLM-managed land along both sides of Helendale Road from the intersection of the existing unnamed roadway subject of the ROW application to Highway 58.
- **B-18:** The nesting bird surveys required by Mitigation Measure B-11 of the COA MMP for the HCF site, shall be implemented concurrently for the area subject to the ROW.
- **B-19:** In order to ensure no net loss of suitable desert tortoise habitat from the Proposed Action for the approximately 6.5 acres of the 1.3-mile length of the roadway subject of the ROW between the HCF site and Helendale Road, habitat will be set aside at a ratio of 3 to 1 acres, preserved land to developed land. As the widening and improvement of the road proposed under the ROW will impact a total of approximately 6.5 acres, this will result in the preservation of an additional 19.5 acres of suitable desert tortoise habitat. The mitigation land will be acquired and managed in accordance with the CDFG ITP.

The Proposed Action includes the terms mandated by the MMP and the CUP, as discussed particularly in **Section 1.4** and **Section 4.1.4**, as well as the mitigation measures imposed by BLM and identified above. All terms mandated by the BO and CDFG ITP are also binding terms of the Proposed Action, and shall be incorporated into the right-of-way grant.

#### **Cultural Resources**

All mitigation measures required by the County through the COA and associated MMP for the HCF have been incorporated into the Proposed Action and are adopted, including conditions not specifically related to the access road. The following mitigation measures pertain to the access road and ROW regarding protection of biological resources and are summarized from the COA, as supplemented by BLM:

CR-1: Monitoring by a qualified archaeologist shall occur during grubbing, grading, or any construction excavation that disturbs native soils. In the event that an unanticipated find is discovered during construction activities, the construction crew will stop work in the immediate vicinity of the discovery. The Applicant will report the discovery to the San Bernardino County Museum and the Land Use Services Department. A qualified archaeologist will be required to assess the integrity and significance of any discovery prior to work proceeding in the area.

Should human remains be encountered, work in the vicinity must be terminated and the County Coroner will be notified immediately pursuant to Section 7050.5 of the Health and Safety Code, Section 7050.5 (c). If the coroner recognizes the remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she will contact the Native American Heritage Commission. The Land Use Services Department shall require the Applicant to take reasonable

- measures to avoid or minimize impacts to the resource if the resource is determined to be significant, i.e., eligible for the CRHR.
- CR-2: Monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor is required for all excavation into undisturbed sediments of Pleistocene older alluvium, both at the surface and in the subsurface. Paleontologic monitors must be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens.
- **CR-3:** Any recovered specimens shall be prepared and stabilized to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates.
- CR-4: Any small specimens collected shall be identified and curated into an established, accredited museum repository with permanent retrievable paleontologic storage (e.g., SBCM). These procedures are also essential steps in effective paleontologic mitigation (Scott et al., 2004) and CEQA compliance (Scott and Springer, 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not complete until such curation into an established museum repository has been fully completed and documented.
- **CR-5:** If any paleontological resources are found during excavation, a report of findings with an appended itemized inventory of specimens, shall be prepared and submitted to the County Museum and Land Use Services Department.

# **Other Mitigation**

- **GEN-1:** All vehicles and equipment shall be washed down at regular intervals to reduce spread of invasive species, and dust and spore levels.
- **GEN-2**: Due to needed pre-work surveys, plans for relocation of any desert tortoise found, and compensation requirements that must be met, a notice to proceed will be required to initiate ground-disturbing activities.